R E P O R T R E S U M E S

ED 014 982 JC 670 838

COLLEGES OF APPLIED ARTS AND TECHNOLOGY--BASIC DOCUMENTS.

BY- DAVIS, WILLIAM G.
ONTARIO DEPT. OF EDUCATION, TORONTO

PUB DATE JUN 67

EDRS PRICE MF-$0.25 HC-$1.68 40P.

DESCRIPTORS- *JUNIOR COLLEGES, *VOCATIONAL SCHOOLS, TECHNICAL EDUCATION, COLLEGE PLANNING, AREA VOCATIONAL SCHOOLS, *MASTER PLANS, EDUCATIONAL LEGISLATION, EDUCATIONAL FINANCE, *STATE PROGRAMS, FINANCIAL POLICY, GOVERNMENT ROLE, *FOREIGN COUNTRIES, ONTARIO, CANADA,

A SYSTEM OF 19 COLLEGES OF APPLIED ARTS AND TECHNOLOGY IS PROPOSED FOR ONTARIO. PRIMARILY FOR COMMUTERS, THE COLLEGES WILL HAVE NO (OR FEW) DORMITORIES. THEIR MAJOR PURPOSE WILL BE TO PROVIDE (1) COURSES BEYOND, OR UNSUITABLE FOR, THE SECONDARY SCHOOL, (2) PROGRAMS FOR HIGH SCHOOL GRADUATES WHO WILL NOT ATTEND A UNIVERSITY, AND (3) EDUCATION FOR ADULTS AND YOUTH, REGARDLESS OF PREVIOUS EDUCATION. ALTHOUGH EACH COLLEGE'S PROGRAMS WILL BE DETERMINED BY LOCAL NEEDS, THE SYSTEM WILL PROVIDE A VARIETY OF TECHNICAL AND OCCUPATIONAL CURRICULA, PLUS REMEDIAL, UPGRADING, AND RETRAINING PROGRAMS. NO PRESENT NEED IS SEEN FOR TRANSFER OF COLLEGE-PARALLEL COURSES, AS THE EXPANDING UNIVERSITY SYSTEM WILL PROBABLY BE ABLE TO ACCOMMODATE ITS APPLICANTS. CENTRALIZED FINANCING HAS BEEN SELECTED AS MORE EFFICIENT THAN ESTABLISHMENT AND COORDINATION OF A PROVINCE-WIDE SYSTEM OF LOCAL ADMINISTRATIVE AND FUNDING AGENCIES, ALTHOUGH THERE WILL BE LOCAL BOARDS OF GOVERNORS AND LOCAL ADVISORY COMMITTEES. BECAUSE OF THEIR EXPERIENCE IN VOCATIONAL AND TECHNICAL TRAINING, THE DEPARTMENT OF EDUCATION, RATHER THAN THE DEPARTMENT OF UNIVERSITY AFFAIRS, WILL ADMINISTER THE SYSTEM. THE DOCUMENT INCLUDES THE FULL TEXT OF THE ENABLING ACT AND REGULATIONS, WITH THE OPERATING PRINCIPLES FOR THE SYSTEM. (HH)

ED014982

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

COLLEGES OF APPLIED ARTS AND TECHNOLOGY

ONTARIO DEPARTMENT
OF EDUCATION

COLLEGES OF APPLIED
ARTS AND TECHNOLOGY

Basic Documents

UNIVERSITY OF CALIF.
LOS ANGELES

JUNE 1967

SEP 11 1967

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

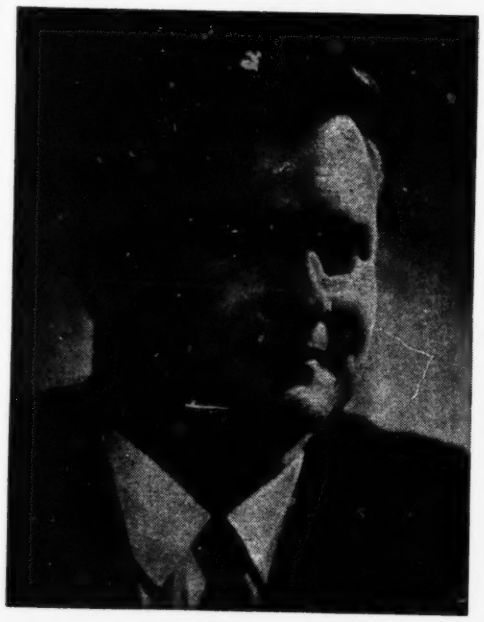
BASIC DOCUMENTS RELATING TO COLLEGES OF APPLIED ARTS AND TECHNOLOGY

Table of Contents

	Page
Statement by Hon. William G. Davis in the Legislature	5
Statement regarding establishment of College areas	17
Appointments to the Ontario Council of Regents	22
Act to Amend the Department of Education Act (Bill 153)	24
Ontario Gazette Announcement of Ontario Regulation 268/65	27
Some Unique Features of the Colleges of Applied Arts and Technology	32
Locations of Colleges of Applied Arts and Technology	38

First Printing, January 1966
Second Printing, June 1966
Third Printing with Revisions, June 1967

Produced by the Information Branch
ONTARIO DEPARTMENT OF EDUCATION



William G. Davis

A Message from the Minister of Education

The first edition of the Colleges of Applied Arts and Technology *Basic Documents*, published in January of 1966, met with an extremely favourable response. In a very short time more than 3,000 copies were distributed.

This third edition contains all of the original information plus a list of the members of the Council of Regents and data on the College areas. To provide additional information, a section on the unique features of the Colleges has been added.

William G. Davis

STATEMENT
BY THE MINISTER
IN THE
LEGISLATURE
21 May 1965

Mr. Speaker: The introduction of this Bill providing enabling legislation for the establishment and operation of a system of COLLEGES OF APPLIED ARTS AND TECHNOLOGY is an historic occasion in education in our Province.

The Bill marks a major step forward in the development of our educational system; it provides for the introduction of a new level and type of education, one which is still in keeping with our traditions and accomplishments. Above all else, it goes far towards making a reality of the promise -- indeed of the stated policy -- of this Government to provide through education and training, not only an equality of opportunity to all sectors of our population, but the fullest possible development of each individual to the limit of his ability. In this new age of technological change and invention, also, it is essential to the continued growth and expansion of the economy of our Province, and of our nation, that adequate facilities be made generally available for the education and training of craftsmen, technicians and technologists. Dr. John Deutsch, Chairman of the Economic Council of Canada, made this point abundantly clear in his address of March 1, 1965, to the Canadian Club in Toronto, wherein he stated:

"The world in which we live and must make our way is one which demands an ever-changing pattern of occupations and rising levels of skills. The occupations which are growing most rapidly are those which involve advancing levels of basic education and training. The occupations requiring the lowest levels of formal education are declining . . . Much has already been done to meet the educational needs of our times, but there are significant deficiencies and gaps which remain to be overcome, especially in respect of research, the retraining of workers and the development of highly skilled manpower . . . a considerable number of (Canadian) companies are experiencing a scarcity of managerial, technical and scientific personnel . . . There has long been a deficiency in our educational system in regard to the training of technical personnel beyond the high school but short of the university level . . . An adequate general education is the best basis on which to build and to rebuild the particular work skills which the future will require . . . In addition to adequate general education, the increasing speed of technological change requires greatly expanded efforts in the fields of training, retraining, aids to labour mobility and job placement

services . . . to achieve our goals . . . we must invest not only in buildings and machines; we must also invest rising amounts in research, and in the education and training of our youth. The value of our natural wealth is great, but in the present-day world, there are even greater riches in the knowledge and skills of men."

Statements of this nature underline the importance of the recommendations for the expansion of technical education and trades training made by our own *Select Committee on Manpower Training,* under the chairmanship of the Honourable J. R. Simonett, which reported in February, 1963, and of the emphasis placed on the implications of technological change during the September, 1963, Conference on Automation and Social Change.

The policy of this Government was set forth with equal clarity and forcefulness by the Premier, the Honourable John P. Robarts, in a major statement to this Assembly on February 23, 1965. The implications of technological change for economic growth and for education were stated in these words:

"The Government of Ontario recognizes that while there are differences of opinion as to the nature, extent and timing of public policy, there is nevertheless basic agreement on certain fundamental assumptions about the problem of technological change.

"It is generally agreed that changes in technology have always and will continue to affect our social and economic system. It is also agreed that the rate of change in our social and economic system is related to the rate of change in technology and that the rate of technological change is accelerating. Further, there is general acceptance that the first implication of technological change will be the change in the nature of individual jobs and each such change eventually leads to changes in values, patterns of behaviour and our social institutions, including government itself.

"What has emerged from the evidence of the past four years is that the level of skills or education needed for many of the jobs that have opened up are such that some unemployed have been unable to shift readily from job to job within an industry or from one industry to another. It is almost a paradox that future growth in Ontario may be hampered because of skill shortage rather than by displacement of workers by sophisticated machines.

"Ontario's future growth and the well-being of its people depend upon our continued ability to improve our competitive position as an industrial economy. This Government believes that increased productivity and efficiency must be our goal and that this goal can be best achieved in an economy in which each individual has freedom of choice.

"What of the future? The evidence is surely clear and irrefutable: social and technological changes, including those arising through automation, are not only inevitable but in the long-run beneficial.

"The whole history of mankind has been a story of change and adapta-

tion; without change, obviously, there can be no improvement. While the rate of change and the rate of production of knowledge and technological applications have increased substantially in recent years, this has been a man-made and man-dominated phenomenon, arising in large part through deliberate concentration of material and human resources for this purpose in research and development.

"Nevertheless, we know that many changes which lie ahead of us will have far-reaching implications for employment, for everyday living, and more particularly for education and training, not only of children and youth but of adults as well.

"The long-term solution to most of our problems obviously lies in education and training, in the fullest possible development and utilization of all our human resources. We must prepare Canadian youth to enter the multitude of highly-skilled jobs available today and the ever greater number which will arise in the future."

The policy of this government with respect to education and training in this connection was laid down by Mr. Robarts in the same statement as follows:

"Our true wealth resides in an educated citizenry; our shrewdest and most profitable investment rests in the education of our people. A general phenomenon of our day is that brainworkers — ('knowledge workers', as they are more frequently labelled, to contrast with 'manual workers'), and these, in the future, of an ever-higher calibre — are the prime economic need for societies in advanced states of industrialism.

"It is the task and the purpose of this government to provide whatever opportunities are necessary to enable each individual, through education, to develop his potentialities to the fullest degree and to employ his talents to the greatest advantage, and we plan to accomplish this through free choice, not by coercion and regimentation of our fellow-citizens.

"It we are to attain these ends, we must of course envisage an educational structure far greater and more efficient than any we have yet known.

"In education, as in other segments of our economy, the key to our future clearly lies in research and development — in planning to anticipate and meet the demands of social and technological change through deliberate alteration of the educational structure. This will require research and experimentation, and a continuing evaluation of the old and the new. Fruitful changes must be made throughout our school system, without, of course, destroying those valuable and still useful parts of the structure developed over many years."

I believe, Mr. Speaker, that the proposed legislation for COLLEGES OF APPLIED ARTS AND TECHNOLOGY must be viewed in the light of the economic and social demands not only of today but of tomorrow. It will be recognized, I am confident, that this expansion of our school system is imperative to meet the needs of individual citizens as well as those of

society as a whole. This development is another step towards the fulfillment of our efforts to expand and re-design our system of schools and universities to meet more adequately the changing demands of challenging times. We have recently completed, as the honourable members are well aware, a far-reaching reorganization of our secondary school programs and, under the Federal-Provincial Agreement, have built vocational schools sufficient in number to ensure that courses of study in the commercial and technical fields, as well as in the academic, are provided throughout the province. I may add, parenthetically, that these new courses have met with enthusiastic acceptance and support — almost embarrassingly so in some communities, I must admit, where the realities of actual enrolment have somewhat outstripped the expectations of the planners. At the same time, we have approved and underwritten the expansion of our university facilities unprecedented in our history; indeed, so I am told, of a scope and adequacy surpassed in few, if any, other jurisdictions.

Now, having put in train our plans for other areas of our school system, we can focus our attention on the design of this remaining section, directly related to the applied arts and technology, for full-time and for part-time students, in day and in evening courses, and planned to meet the relevant needs of all adults within a community, at all socio-economic levels, of all kinds of interests and aptitudes, and at all stages of educational achievement. Our efforts here could, I suppose, be considered also as a co-ordination and culmination of all previous work in this area: a welding into a coherent whole, so to speak, of the parts which have sometimes seemed fragmented and unrelated, so that we have a complete system extending from the kindergarten to the post-graduate level.

I wish to turn now, Mr. Speaker, to a brief review and evaluation of recent changes and developments in the worlds of work and of education which have made essential the creation of this new level of our school system. In terms of the factor of need, there are two or three main items which stand out above all others. First, there is the matter of the so-called "knowledge explosion", by which is meant that recently knowledge in certain fields — science, in particular — has been doubling about every ten years. One very natural consequence is that a longer period of schooling is demanded by the circumstances; where the limit may be, I simply don't know, but obviously a much higher level of education is going to be required of all of us. We now have accepted the principle of secondary education for all. We probably must now recognize the inevitability of some form of post-secondary education (i.e. beyond Grade 12) for all capable of profiting from it. Further education must be provided in a variety of courses or programs, varying in length from a few weeks to six or more years; in new types of institutions as well as in universities, and for part-time day and evening students, as well as for full-time day students, for adults as well as for youth, and for the upgrading and updating

of workers either on the job or in evening courses, as well as for the unemployed.

Secondly, the new technological revolution in which we have been caught up has seen the disappearance of most of the unskilled, and a high proportion of the semi-skilled, jobs. Indeed, the occupational world has altered beyond recognition during the period of 25 years extending from the beginning of the Second World War. Much higher levels of basic educational qualifications, and of technical skills, for instance, are demanded of those who supervise or work in our new automated factories and offices. No employer would dare – or could afford – to entrust one of the new complex and expensive machines to the inept handling of an unskilled, poorly-educated employee. These higher levels of skill and knowledge simply must be attained by employees, either before employment or through upgrading courses while in service, as Dr. Deutsch pointed out. I admit, however, that I experienced a considerable sense of shock when, during our recent visit to California to study these and related matters, we were informed quite casually and as an accepted fact of life, that employers in that jurisdiction weren't really willing to accept high school graduation as a minimum qualification for new employees, but were demanding graduation from junior college as the irreducible minimum. As I review the situation developing in our own very highly industrialized province, though, I not only appreciate their situation better but realize that I had probably been afforded a preview of things to come in Ontario, and in the very near future. We simply must provide the facilities for education and training at these higher levels if we hope to continue to compete for markets on even terms at home and abroad.

The third and final factor which I wish to mention is what is commonly known as the "population explosion". (You may think I am being somewhat melodramatic in using the terms "knowledge explosion", "technological revolution", and "population explosion", but I assure you I am not; these are, of course, the simple facts of life with which we must live today!) Probably I need stress neither the facts nor the implications in this matter of population growth; you are well aware that we have just experienced the first of the many tidal waves of students that will threaten to engulf our secondary and post-secondary educational institutions for the next 20 years at least.

Nevertheless, a brief review of the facts may not be amiss. Let us start with the live births. These had reached an all-time low before the Second World War, at about 60,000 per year (the small pool of talent, incidentally, from which we have had to recruit our teachers for many years), then climbed dramatically right after the war (we have the first wave in Grade 13 this year, hence the 25 per cent increase in Grade 13 enrolment). After a short period of levelling off at around 100,000 the number of live births climbed steadily each year to reach a new high of approximately

160,000 in 1960. (You will realize, of course, that the survivors of those born in 1960 will probably graduate from high school in 1978 and 1979, and from our universities in 1982 or 1983.) In addition, account must be taken of the added load arising through immigration from other provinces and countries; no small load, I may add. I note that in the period 1949 to 1962 Ontario received 261,000 children under 18 years of age from other countries – and, from other provinces, a net gain of 40,700 children under 16 years of age. Excluding those children under 5 years of age, we have had to supply during those few short years about 8,000 additional classrooms and teachers for immigrant children alone, over and above our own natural increase. No wonder our schools are and have been "bursting at the seams".

At the secondary level, an additional pressure arose through the extraordinary increase in retention rates: the secondary school enrolment was 37.6 per cent of the population aged 15-19 years in 1946, but reached 74.1 per cent in 1964. Actually, up to 1957 and 1958, the secondary school enrolment increases arose mainly through the increased retention rates; and, of course, under the reorganized secondary school programs now in effect, such rates will no doubt continue to increase. I am comforted by the fact, however, that there is an automatic 100 per cent limit on the age-group, and we are nearly three-quarters of the way along that road! I am proud of the fact that these pressures have developed; nothing else could so dramatically illustrate the success of the policy of this Government to extend secondary school facilities to all parts of our province, thus going far towards making equality of educational opportunity a reality for our children, and providing a variety of programs designed to meet the individual needs of all children.

As for the future, the predictions are rather staggering. For elementary schools, we started with 539,000 pupils enrolled in September 1946, reached 1,278,500 by September 1964, and anticipate that we should reach the two million mark by 1982 or 1983. The secondary school expansion has been more fantastic: we had 123,800 pupils in September 1946, reached 395,300 in September 1964, and expect to reach at least 700,000 about 1983, perhaps even earlier. As you no doubt know, enrolment in our universities has continued, and obviously will continue, to keep pace – only at a faster rate: full-time undergraduate enrolment nearly tripled between the end of the war and 1960, is expected to triple again during the 60's, and double again in the 70's, levelling off (we hope!) for a few years in the early 1980's. For a glimpse into the more distant future, may I point out to the honourable members that whereas the 0-5 years age group in 1941 totalled about 300,000 (and some of the academic survivors will now be pursuing graduate work on the Province of Ontario Graduate Fellowships), we anticipate that the same age group will total about 1,700,000 children in 1986 (only a mere twenty years from now,

and the academic survivors of that age group will constitute the high school enrolment of the year A.D. 2001).

With such growth patterns facing us in the segments of the present school system, why add another part to the structure? Well, we really have no choice; certainly not as we press forward with our reorganized programs in secondary schools. It is not feasible, nor indeed desirable, that all graduates of our high schools should go to university. The real needs of a very substantial number of our young people lie elsewhere; they would be served poorly and fare poorly in the traditional university programs. Perhaps the best summary of the situation may be found in the Report of *The Grade 13 Study Committee, 1964,* and I quote:

"The truth of the matter is that we are now in an entirely different world from that of the 1920's and 1930's, and it is necessary that we extend our educational system to meet the demands of this new world. In the past when we have faced that sort of crisis, we have solved the problem by expanding our secondary school program — in 1871, for example, when we added general education for the many to special education for the few, or in the 1920's when technical training was introduced in a considerable number of high schools. In the present crisis, the need cannot be met simply by alterations or additions at secondary school level; this time we must turn our attention to the post-secondary level, where we must create a new kind of institution that will provide, in the interests of students for whom a university course is unsuitable, a type of training which universities are not designed to offer. Fortunately, a beginning has been made in the establishment of the institutes of technology and vocational centres, but as yet these are too few in number and their offerings are too narrow in range to satisfy what is required both by the nature of our developing economy and the talents of our young people. The committee is therefore recommending the establishment of community colleges to provide these new and alternative programs."

I maintain, Mr. Speaker, that the evidence of need and of demand for this new sector of our system is overwhelming. The policy of the government, which has been so clearly stated by Mr. Robarts, is that *we will meet these needs and demands;* I deem it my responsibility, as Minister of Education, to move at once towards full implementation of these policies, with which I am so wholeheartedly in accord.

Many people have assumed, but quite erroneously, that I am planning simply to import and implant unchanged in our province the system of junior colleges, or community colleges, that has been developed in the United States. It is true that the American junior college has had a long and honourable history, for fifty years or more in some states, but our "senior matriculation", so I am told, admitting to what was then the second year of a four-year B.A. degree course at the University of Toronto, dates back to 1853! We have, therefore, had experience for over a century

with a program half the length of the junior college transfer courses. Moreover, we have had vocational education at the secondary school level for over 40 years. Our system of post-secondary technical institutes started officially 20 years ago, and we now have more than 12,000 students enrolled in day courses and evening classes in this type of institution.

What we have in mind, therefore, as you will see later, is not the imposition of an imported or alien institution on our educational system, but the development and expansion of our present system to meet our particular needs. Although it is true that our COLLEGES OF APPLIED ARTS AND TECHNOLOGY may resemble some of their United States counterparts in many respects — not surprising, of course, since the age group is the same and the basic needs of youth in our two countries differ little — yet there will be real differences in programs and in emphasis. I hasten to add that, far from refusing to profit from experience elsewhere, we have deliberately sought to learn from others and to select the features which strengthen our own proposals. I have personally visited many of these institutions in the United States, more recently in Florida and California, and have discussed our tentative plans with knowledgeable educators and laymen in other provinces of Canada as well. As you no doubt know, a form of junior college, differing fundamentally from our proposed colleges in the emphasis on university-parallel courses, is being developed in Alberta and in British Columbia. We are observing their experience with great interest.

What programs do we plan to offer in these colleges? As indicated earlier, we have in mind composite or comprehensive institutions, preferably with several buildings on the same campus, providing a wide variety of programs of varying length, including work-experience programs, by day and in the evening, for adults as well as for youth, and for probably more part-time than full-time students.

Nevertheless, some features will be common to all programs: they will be occupation-oriented, for the most part; they will be designed to meet the needs of the local community — and they will be "commuter" colleges. Residence or dormitory facilities will not be provided, except possibly in some areas of Northern Ontario.

We have not yet determined the number and location of these colleges, or the criteria which should determine the area that each should serve. I have initiated studies of all these matters, but definite decisions must naturally await the formation of the provincial Council of Regents referred to in the legislation. My hope is that a few such colleges will be in operation in the very near future, but obviously the province-wide system cannot be developed overnight. Studies of local needs and requirements must be made in each case, and much will depend on evidence of real local interest in the establishment and operation of such an institution. We must decide what part our present institutes of technology and trades and vocational centres will play in the new plan. It may well be that the provincial Council

of Regents will recommend a complete integration of existing institutions and efforts, using the present buildings, staff, and programs as nuclei for the development of the new colleges.

As for the programs, our plans are not yet advanced to the point where I can be specific and definite. Besides, the emphasis not only could but should vary from one community to another, as local needs dictate. In general, however, one may recognize three major responsibilities of every such college:

(1) to provide courses of types and levels beyond, or not suited to, the secondary school setting;

(2) to meet the needs of graduates from any secondary school program, apart from those wishing to attend university; and

(3) to meet the educational needs of adults and out-of-school youth, whether or not they are secondary school graduates.

I would hope to see the following range of offerings in most if not all COLLEGES OF APPLIED ARTS AND TECHNOLOGY, the choice to be determined by local circumstances, as indicated above, and extended where a particular need exists in a community.

(a) Engineering technician and technologist programs below university level

(b) Semiprofessional non-engineering type programs (e.g. in the paramedical field)

(c) High level programs in office and distributive occupations, specifically of junior and middle management level, and including courses for small business

(d) Agricultural and agricultural-related programs, at least in rural areas, in co-operation with the Department of Agriculture

(e) General adult education programs, including cultural and leisure time activities

(f) Programs of recreation, including physical education

(g) General or liberal education courses, including remedial courses in basic subjects, and often incorporated as part of the other programs (e.g. English, Mathematics, Science)

(h) Retraining, upgrading and updating courses

(i) Trades skills, pre-apprenticeship, and apprenticeship training

(j) Service industry courses (e.g. for tourist industry)

(k) Commercial courses (e.g. cost accounting, junior accounting, data processing, computer programming)

(l) Other courses to meet local needs.

With respect to the general or liberal education courses, and the general adult education programs, I would point out that these are not thought of as university level courses. Nevertheless no able and qualified student

should be prevented from going on from a COLLEGE OF APPLIED ARTS AND TECHNOLOGY to a university, and indeed such a pattern exists today for able graduates of our institutes of technology, as you may know. The university doors should always be open to capable and ambitious young men and women. We will set up a committee of representatives of my department and of the universities to determine, as proposed by the Ontario Council of University Faculty Associations, in their recent brief to me, the conditions and procedures under which universities may grant admission to outstanding students who have completed successfully an appropriate program at one of our COLLEGES OF APPLIED ARTS AND TECHNOLOGY and who have demonstrated that they are prepared to undertake university work.

Moreover, I have no doubt that where circumstances warrant it, some of our universities will make arrangements with particular COLLEGES OF APPLIED ARTS AND TECHNOLOGY, as provided in the proposed legislation, to conduct one or two years of their own degree courses within those colleges. The present university extension courses leading to a general Arts degree might be a logical beginning point.

You will note that I have not included in the list of courses what the Americans call the "transfer" or "college-parallel" courses, leading to advanced placement in universities, because there is no need for such courses in Ontario at the present time at least. In Ontario we have the Grade 13 course in our secondary schools now, and will probably long have its successor, the proposed Matriculation Year, specifically designed as a university-preparatory program for our academically able students. May I remind you, also, that we have studied very carefully the needs for university-type courses and have adopted as government policy an expansion of existing universities and the establishment of new universities sufficient to meet that particular need for the foreseeable future. Present plans for expansion of university education should suffice for the remainder of this critical decade of the Sixties; and we are now studying the demands of the Seventies. If circumstances so require, we will naturally change or make adaptations to our present plans.

I should mention some of my thoughts on the organization, administration, and financing of these new colleges. We must, of course, have a province-wide system, carefully planned in its development, and built upon our experience with institutes of technology and vocational centres. We have no choice but to press forward as rapidly as possible with the establishment of such colleges and if we are to do so they must, for the immediate future at least, be financed by the Province, without local taxation. The headlong pace of technological change gives no chance of a pause in the development; the needs of youth, of the unemployed, and even of the employed for retraining and up-grading, are urgent. It might take up to five years, for instance, to set up a provincial system of local administra-

tion and financing of such colleges, of the type I observed in Florida and California. We simply cannot wait five years; indeed we cannot afford to mark time for even one year. As I stated earlier, the Ontario Council of Regents should co-ordinate our efforts and provide for a healthy growth. The legislation also provides for the establishment of local boards of governors who shall have the powers of incorporation, subject to regulation, and also for the establishment of local advisory committees in the various branches of studies.

For the foreseeable future, I think that these colleges will not be "free", but that a tuition fee, modest in amount, will be charged. It is anticipated that bursaries and Canada Student Loans will be available to many in these colleges. However, details of administration and financing must await the results of studies already underway. At the stage when plans and regulations are being drafted, which is a task my officials will undertake almost immediately, we will invite the widest possible presentation of comments, suggestions, and proposals from interested parties. I have in mind, in particular, representations to be sought from leaders of industry, labour, and commerce, parents, trustees, and experienced educators.

We have not had an opportunity to investigate thoroughly the source of supply and form of training required for the members of staff of these new colleges. From experience gained elsewhere, and within our own province in the case of institutes of technology and vocational centres, however, I have gained the impression that many of the teachers will come from industry and commerce, and hence will already possess the essential technical skills. I recognize, of course, that it is inevitable that some of the teachers will be recruited from the present secondary school staffs, and from university staffs, which will naturally pose some irksome problems of supply of staff for those already hard-pressed institutions. This is a difficulty, however, that we are aware of and which will require careful study and consideration.

For the present, at least, it is my intention to commence operation of these new institutions under the Department of Education, not under the new Department of University Affairs, although the colleges will be post-secondary institutions and the fullest co-operation between these two departments of government will be essential. There are many advantages to be gained – and perhaps even a few disadvantages to be suffered – under such an arrangement. I would remind you, for instance, that we have had in the Department of Education some considerable experience with institutes of technology and vocational centres, and in many respects these older institutions have served, and are serving even today, as prototypes of the new colleges. Indeed, our present Technological and Trades Training Branch within the Department of Education might well be re-constituted and expanded to fulfill the necessary functions at that level. Further, we have over the years developed reasonably satisfactory financial working

arrangements with the Federal Government authorities in the field of technical education and trade training, and we plan to take full advantage of these financial arrangements for our new COLLEGES OF APPLIED ARTS AND TECHNOLOGY. I need hardly remind you that the new Department of University Affairs certainly has its hands full trying to cope with the vexing and significant problems of university expansion. In the meantime there must be some overlapping of function and duties – without serious duplication, naturally. I know the Presidents of our universities suggested that the "City Colleges" they advocated should be administered by the Department of University Affairs, but in our discussions they readily admitted the logic of my proposal, and have never pressed this particular point. Perhaps in the future a change of jurisdiction will appear advisable, and if so it will be made; for the present, however, the arrangements I have suggested seem much more advantageous.

I readily admit that this concept of COLLEGES OF APPLIED ARTS AND TECHNOLOGY has captured my imagination; I am enthusiastic and optimistic about the probable outcome of this new venture in education. I am confident it will go far to meet the needs of youth and adults in the future. I wish the opportunities were available generally throughout our province today; we intend to see to it that developments take place as rapidly as possible. I recognize full well the scope and magnitude of the undertaking; in numbers enrolled, if not in costs, the new college system could eventually well outstrip the university family. But once more, and more particularly now that our four-year secondary school programs are becoming accepted and are rapidly expanding, we simply must provide opportunities for the higher education of this segment of our population as well as for the university-bound group.

In closing, I wish to express appreciation to the individuals and the groups such as the Ontario university presidents, the Ontario Council of University Faculty Associations, and the Ontario Teachers' Federation who submitted briefs for study.

In the long-run, this new educational venture will be rewarding to our society as a whole, perhaps equal in returns to that enjoyed by the individuals concerned, with rewards in wealth and technical advancement as well as in human happiness and satisfaction. To do otherwise than forge ahead along the lines I have sketched for you today, would seem to me to mean turning our backs on the real and legitimate needs and demands of very substantial numbers of young and older people in our province. I have no intention of permitting any group of young people to be forgotten and deprived, or of any group of adults needing retraining for a new world of work in a new age to be neglected. The new era is golden with promise, if only we prepare in time for it. As I see it, Mr. Speaker, we need these colleges as a keystone in one of the segments of the educational system in our province.

Statement Regarding the Establishment of College areas

The following statement was made before the Ontario Legislature by the Hon. William G. Davis, Minister of Education, 16 March 1966:

I am happy to announce that an Order-in-Council has been approved setting up eighteen areas for the planning and development of COLLEGES OF APPLIED ARTS AND TECHNOLOGY. The eighteen areas established are as follows:

Area 1 to serve all the municipalities, including any cities or separated towns, within the counties of
Renfrew
Lanark
Carleton
Russell
Prescott

Area 2 to serve all the municipalities, including any cities or separated towns, within the counties of
Frontenac
Leeds
Grenville
Dundas
Stormont
Glengarry

Area 3 to serve all the municipalities, including any cities or separated towns, within the counties of
Lennox and Addington
Hastings
Prince Edward
Northumberland
Peterborough
Haliburton
Victoria

Area 4 to serve all the municipalities, including any cities or separated towns, within the counties of
Ontario
Durham

Area 5 to serve the municipalities of
The Township of Scarborough
The Township of East York and
The Town of Leaside

Area 6 to serve the municipalities of
The Township of Etobicoke
The Township of York
and the Towns of Mimico, New Toronto and Weston and the Village of Long Branch

Area 7 to serve the Township of North York and all the municipalities within the County of York that do not form part of the present Metropolitan Toronto area

Area 8 to serve all the municipalities, including any cities or separated towns, within the counties of
Peel
Halton

Area 9 to serve all the municipalities, including any cities or separated towns, within the counties of
Wentworth
Brant
and the Townships of Oneida, Seneca, N. Cayuga, Walpole and Rainham in the County of Haldimand and any urban municipalities within the boundaries of those townships and the townships of N. Grimsby, S. Grimsby and Caistor in the County of Lincoln and any urban municipalities within the boundaries of those townships

Area 10 to serve all the municipalities, including any cities or separated towns, within the county of
Welland
and the Townships of Niagara, Grantham, Louth, Clinton and Gainsborough in the County of Lincoln and any urban municipalities within the boundaries of those townships and the Townships of Moulton, Sherbrooke, Dunn, Canborough and S. Cayuga in the County of Haldimand and any urban municipalities within the boundaries of those townships

Area 11 to serve all the municipalities, including any cities or separated towns, within the counties of
Middlesex
Elgin
Norfolk
Oxford

Area 12 to serve all the municipalities, including any cities or separated towns, within the counties of
Essex
Kent

Area 13 to serve all the municipalities, including any cities or separated towns, within the county of
Lambton

Area 14 to serve all the municipalities, including any cities or separated towns, within the counties of
Huron
Perth
Waterloo
Wellington

Area 15 to serve all the municipalities, including any cities or separated towns, within the counties of
Bruce
Grey
Dufferin
Simcoe
and the districts of
Muskoka
Parry Sound

Area 16 to serve all the municipalities, including any cities or separated towns, within the districts of
Algoma
Manitoulin
Sudbury
Nipissing

Area 17 to serve all the municipalities, including any cities or separated towns, within the districts of
Cochrane
Timiskaming

Area 18 to serve all the municipalities, including any cities or separated towns, within the districts of
Kenora
Rainy River
Thunder Bay

Area 19 established by an Order-in-Council of July 14, 1966, to serve
the City of Toronto
the Village of Forest Hill
the Village of Swansea

After study of the complicated problem of locating future colleges across the Province, the Council of Regents adopted the ten regional development areas of Ontario as a basic structure upon which to plan. There were several reasons for doing this. The projections of school enrolments and population statistics indicated that at least one college would be needed for each of the ten areas. Also, the Council recognized that there should be a close relationship between any college program and the long term economic development plans for a particular region. The Council believes that a COLLEGE OF APPLIED ARTS AND TECHNOLOGY can play a vital role in the task of developing the human resources of the Province in relation to the economic and social needs of each area.

Because of the varying population densities in different parts of Ontario, it is obvious that some regions will require more than one college immediately, and many will require more than one in future years. The plan suggested and now adopted provides for an orderly well-planned growth which can be phased and developed over the next five to ten years. It also provides a base for the gradual integration of existing post-secondary institutions into the college plan.

In conjunction with the Council of Regents, we will now proceed to appoint boards of governors in areas of high priority almost immediately. It is expected that some growth in post-secondary opportunities can be realized by September of 1966.

This growth will be accomplished by the expansion of existing facilities in areas 1, 9, 11, 12, 16 and 17 together with the development of 3 or 4 additional areas by the leasing of temporary accommodation. We see Lambton, Scarborough and North York areas as being among the first of these. Additional student places will thus be provided in existing programs as well as through the introduction of courses in completely new areas of study.

This plan would indicate that 19 colleges of varying size and complexity would be possible within the next few years. The Council of Regents has pointed out that more than one college might be required in an area over a period of years. This need will be determined as studies continue. The Council has further indicated that in some areas a split campus operation might be necessary with a single college operating facilities in more than one centre.

These 19 areas have been established for purposes of administration. Students living in one area may attend a college in another area.

It is necessary that the colleges be developed on an orderly basis. The Council of Regents will be asked to recommend further priorities and boards of governors will be duly appointed. Each board of governors will be responsible for establishing college locations in its own area, subject to approval by the Council of Regents.

By the mid-1970's Ontario might require 26 colleges.

Appointments to the Ontario Council of Regents for Colleges of Applied Arts and Technology

Bill 153, an Act to Amend the Department of Education Act, gives authority for the establishment of the Council of Regents.

The members of the Council were appointed by the Minister to assist him in the planning, establishment and co-ordination of programs of instruction and services for the Colleges.

Those persons appointed to the Council of Regents are:

DR. HOWARD H. KERR *Chairman*	55 Eglinton Avenue East Toronto 12, Ontario
D. McC. SMYTH *Vice Chairman*	Dean of Atkinson College York University 2275 Bayview Avenue, Toronto 12, Ontario
DR. ORVILLE E. AULT	2 Chinook Crescent, Ottawa, Ontario
DONAT J. BROUSSEAU	Principal Kapuskasing District High School Kapuskasing, Ontario
D. O. DAVIS	Vice-President, Engineering Dominion Foundries and Steel Company Limited P.O. Box 460 Hamilton, Ontario
JOHN E. J. FAHLGREN	President Cochenour Willans Gold Mines Ltd. Cochenour, Ontario
R. ALAN HAY	Executive Director Ontario Hospital Association 24 Ferrand Drive Don Mills, Ontario
WILLIAM LADYMAN	International Vice-President International Brotherhood of Electrical Workers 88 University Avenue, Suite 601 Toronto, Ontario
DR. MICHAEL E. LUCYK	Assistant Professor, Faculty of Dentistry University of Toronto Toronto, Ontario

MISS MARY MACAULAY	Chartered Life Underwriter Manufacturers Life Insurance Co. 44 Victoria Street, 9th Floor Toronto, Ontario
DR. GERALD MAHER	Inspector of Schools Board of Education, Borough of North York 15 Oakburn Crescent Willowdale, Ontario
WILLIAM F. McMULLEN	Director of Personnel and University Services Trent University Peterborough, Ontario
JOHN F. O'NEILL	Superintendent Employee Relations Algoma Steel Corporation Ltd. Sault Ste. Marie, Ontario
DR. ROBERT J. UFFEN	Chairman, Defence Research Board Department of National Defence Ottawa, Ontario
RICHARD L. WHITTINGTON	Executive Director Kent County Children's Aid Society 45 Adelaide North, Chatham, Ontario

3RD SESSION, 27TH LEGISLATURE, ONTARIO
13-14 ELIZABETH II, 1965

BILL 153

An Act to amend The Department of Education Act

MR. DAVIS

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. *The Department of Education Act* is amended by adding thereto the following section: R.S.O. 1960, c. 94, amended

14*a*. (1) Subject to the approval of the Lieutenant Governor in Council, the Minister may establish, name, maintain, conduct and govern colleges of applied arts and technology that offer programs of instruction in one or more fields of vocational, technological, general and recreational education and training in day or evening courses and for full-time or part-time students. Colleges of applied arts and technology

(2) The Minister shall be assisted in the planning, establishment and co-ordination of programs of instruction and services for such colleges by a council to be known as the Ontario Council of Regents for Colleges of Applied Arts and Technology composed of such members as may be appointed by the Minister. Council of Regents

(3) There shall be a board of governors for each college of applied arts and technology, which shall be a corporation with such name as the Minister may designate and shall be composed of such members and have such powers and duties, in addition to those under *The Corporations Act* as varied by the regulations, as may be provided by the regulations, and each board shall be assisted by an advisory committee for each branch of a program of instruction offered in the college other than programs of instruction referred to in subsection 5. Boards of governors, advisory committees

R.S.O. 1960, c. 71

(4) For the purposes of subsection 1 and subject to the approval of the Minister, a board of governors may enter Agreements

into an agreement with any organization representing one or more branches of industry or commerce or with any professional organization.

Idem

(5) Subject to the approval of the Minister, a board of governors of a college may enter into an agreement with a university for the establishment, maintenance and conduct by the university in the college of programs of instruction leading to degrees, certificates or diplomas awarded by the university.

Cost of establishment and maintenance

(6) The cost of the establishment, maintenance and conduct of a college shall be payable until the 31st day of March, 1966, out of the Consolidated Revenue Fund, and thereafter out of moneys appropriated therefor by the Legislature and out of moneys received from Canada for the purposes of technical education or other programs of instruction of the college, moneys contributed by organizations that have entered into agreements with the board of governors of the college, fees paid by students and moneys received from other sources.

Regulations

(7) Without restricting the generality of section 12, the Minister, subject to the approval of the Lieutenant Governor in Council, may make regulations with respect to colleges of applied arts and technology,

(*a*) providing for the composition of the Ontario Council of Regents for Colleges of Applied Arts and Technology;

(*b*) providing for the composition of the boards of governors on a suitably representative basis and of the advisory committees thereof and for the appointment of the members of such boards and committees;

(*c*) prescribing the powers and duties of boards of governors and advisory committees, the manner of calling and conducting the meetings thereof and the procedure for the election or appointment of chairmen and officers;

(*d*) prescribing the type, content and duration of programs of instruction to be offered;

(*e*) prescribing the requirements for admission to any program of instruction, and prescribing the terms and conditions upon which students may remain in, or be discharged from, any program of instruction;

(*f*) for the granting of certificates and diplomas of

standing following successful completion of any program of instruction;

(*g*) prescribing the qualifications and conditions of service of members of the teaching staffs of such colleges;

(*h*) providing for the payment of travelling allowances or expenses to members of the Ontario Council of Regents for Colleges of Applied Arts and Technology, boards of governors and advisory committees, and of the officers and employees of such colleges;

(*i*) requiring students to pay registration, tuition and laboratory fees in respect of any program of instruction, and fixing the amounts and manner of payment thereof;

(*j*) providing for the admission of persons from outside Ontario, and prescribing fees payable by such persons in respect of any program of instruction and the manner of payment thereof;

(*k*) providing for the incorporation of schools established under section 14 with such colleges.

(8) No regulation made under subsection 7 applies to a university or to programs of instruction given by a university in such colleges. **Application of regulations**

2. This Act comes into force on the day it receives Royal Assent. **Commencement**

3. This Act may be cited as *The Department of Education Amendment Act, 1965*. **Short title**

O. REG. 268/65. COLLEGES OF APPLIED ARTS AND TECHNOLOGY.
MADE OCTOBER 7TH, 1965 APPROVED OCTOBER 7TH, 1965.
FILED OCTOBER 26TH, 1965.

REGULATION MADE UNDER THE DEPARTMENT OF EDUCATION ACT

COLLEGES OF APPLIED ARTS AND TECHNOLOGY

1 In this Regulation,

(*a*) "college" means a college of applied arts and technology that offers programs of instruction in one or more fields of vocational, technological, general and recreational education and training in day or evening courses and for full-time or part-time students;

(*b*) "Council of Regents" means the Ontario Council of Regents for Colleges of Applied Arts and Technology;

(*c*) "municipality" means a city, town, village or township.

2 (1) The Council of Regents shall be composed of fifteen members who shall, subject to subsection 2, hold office for a period of three years.

(2) Of the original fifteen members appointed under subsection 1, five shall retire on the 31st day of December, 1966, five shall retire on the 31st day of December, 1967 and five shall retire on the 31st day of December, 1968.

(3) Any member of the Council of Regents is eligible for reappointment.

(4) Where a vacancy occurs in the membership of the Council of Regents, the vacancy shall be filled by appointment by the Minister.

(5) Nine members of the Council of Regents constitute a quorum.

(6) The Council of Regents shall elect annually from among its members a chairman and a vice-chairman.

(7) The Council of Regents shall appoint a full-time secretary.

(8) The first meeting of the Council of Regents shall be held at a time and at a place determined by the Minister and subsequent

meetings shall be held at such times and places as the Council of Regents determines.

(9) The members of the Council of Regents shall be paid the actual amounts spent in travelling and living expenses while engaged in business of the Council of Regents.

3 (1) A board of governors for a college shall be composed of twelve members, seven of whom, excluding the *ex officio* member referred to in subsection 9, constitute a quorum.

(2) Where a college has been established in an area that comprises one municipality, or part of a municipality,

(*a*) the municipal council shall appoint four members to the board of governors, one of whom shall retire each year, the order of retirement to be determined by the municipal council; and

(*b*) the Council of Regents shall appoint eight members to the board of governors, two of whom shall retire each year, the order of retirement to be determined by the Council of Regents.

(3) Where a college has been established in an area that comprises two or more municipalities, or parts of municipalities, the board of governors shall be established on a formula that is provided by the Council of Regents and that is suitable to the municipal structure of the area.

(4) Any member of the board of governors is eligible for reappointment.

(5) Where a vacancy occurs in the membership of a board of governors, the vacancy shall be filled, in the case of,

(*a*) a member appointed by a municipal council, by the municipal council; and

(*b*) a member appointed by the Council of Regents, by the Council of Regents.

(6) The first members of a board of governors shall take office upon their appointment, and thereafter members of a board of governors shall be appointed at the last regular meeting in a year of,

(*a*) in the case of a member appointed by a municipal council, the municipal council; and

(*b*) in the case of a member appointed by the Council of Regents, the Council of Regents,

and shall take office on the 1st day of January in the year following their appointment.

(7) The first meeting of a board of governors shall be held at such time and at such place as the Council of Regents determines and

subsequent meetings shall be held at least once a month at such times and at such places as the board of governors determines.

(8) A board of governors shall elect annually from among its members a chairman and a vice-chairman who shall be eligible for reappointment.

(9) A director of a college shall be an *ex officio* member of the board of governors.

(10) The board of governors shall appoint a secretary-treasurer.

(11) Minutes of each meeting and such other records as are required by a board of governors or by the Council of Regents shall be kept by the secretary-treasurer.

4 (1) Upon assuming office a board of governors shall make a study of the post-secondary and adult education needs of the area for which the college has been established and shall, as soon as possible after the first meeting of the board of governors, submit for approval to the Council of Regents a report containing specific recommendations concerning the proposed educational program.

(2) The Council of Regents shall consider the recommendations contained in the report referred to in subsection 1 and,

(*a*) where the Council of Regents deems it necessary, may modify or otherwise alter the recommendations; and

(*b*) shall submit the recommendations, or the recommendations as modified or otherwise altered, to the Minister for his approval.

(3) Where the Minister approves the recommendations, or the recommendations as modified or otherwise altered, the board of governors shall employ an architect.

(4) The architect employed by the board of governors shall,

(*a*) prepare sketch plans of the college based upon the approved recommendations; and

(*b*) estimate the cost of the construction of the college.

(5) The sketch plans and the estimate of costs of construction shall be submitted by the board of governors for approval to the Minister.

(6) Where the sketch plans are approved under subsection 5, the board of governors shall cause the architect to prepare final plans and specifications for construction of the college and shall submit the final plans and specifications to the Minister for his approval.

(7) Where the Minister approves the final plans and specifications

referred to in subsection 6, the board of governors shall call for tenders for construction and, subject to the approval of the Minister, shall award the contract to the person who offers the lowest tender.

5 Subject to the approval of the Minister upon the recommendation of the Council of Regents, the board of governors shall select the site, or sites, of the college.

6 (1) A board of governors shall appoint,

(*a*) a director of the college;

(*b*) a principal for each division of the college;

(*c*) a registrar and a bursar and such other administrative, teaching and non-teaching personnel as are necessary,

at the salary and wage rates and according to the terms and conditions established by the Council of Regents and approved by the Minister.

(2) A board of governors shall, not later than the 1st day of September, submit annually for the approval of the Minister an estimate of its operating and capital costs for the next ensuing fiscal year.

(3) The estimate referred to in subsection 2 shall include any estimated surplus or deficit of the current year.

(4) A board of governors shall have printed annually publications of programs of instruction, admission requirements and fees, approved by the Minister upon the recommendation of the Council of Regents.

(5) A board of governors shall appoint an auditor and, not later than the 30th day of June in each year, submit to the Minister an audited financial statement for the preceding fiscal year.

7 (1) A board of governors may, at any time, recommend the introduction of new educational programs at the college to the Council of Regents.

(2) The Council of Regents shall consider the recommendation and,

(*a*) where the Council of Regents deems it necessary, may modify or otherwise alter the recommendation; and

(*b*) shall submit the recommendation, or the recommendation as modified or otherwise altered, to the Minister for his approval.

(3) Where the Minister approves the recommendation, or the recommendation as modified or otherwise altered, the board of governors shall include the new educational program, or the educational program as modified or otherwise altered, in the programs of instruction at the college.

8 Except for programs of instruction conducted under subsection 5 of section 14*a* of the Act, programs of instruction leading to a certificate or diploma shall be approved by the Minister.

9 (1) An advisory committee for each branch of a program of instruction offered at a college shall be composed of members appointed by the board of governors for the college.

(2) An advisory committee shall advise the board of governors and make recommendations to the board of governors regarding programs of instruction and the introduction of new programs of instruction.

10 (1) Subject to the conditions outlined in the publications of the board of governors, referred to in subsection 4 of section 6, any person who is the holder,

(*a*) of an Ontario Secondary School graduation diploma obtained at the end of Grade 12 from any Branch or Program; or

(*b*) of the Ontario Secondary School honour graduation diploma obtained upon completion of Grade 13,

shall be admitted to an appropriate program of instruction upon payment of the fee required.

(2) Subject to the conditions outlined in the publications of the board of governors referred to in subsection 4 of section 6, any person who has attained the age of nineteen years on or before the date of commencement of the program of instruction in which he plans to enrol shall be admitted to an appropriate program of instruction, upon payment of the fee required.

11 A board of governors may approve allowances for travelling on college business by members of the board of governors, the advisory committees, and members of the administrative, teaching and non-teaching personnel of the college, and provision therefor shall be made in the annual budget.

12 Except for programs of instruction conducted under subsection 5 of section 14*a* of the Act, the Minister shall establish certificates and diplomas of standing and shall award such certificates and diplomas upon the recommendation of the board of governors and the Council of Regents and, where no certificates or diplomas are established for programs of instruction, the board of governors may issue certificates of standing.

WILLIAM G. DAVIS,
Minister of Education

Dated at Toronto, this 7th day of October, 1965.

Some Unique Features of Colleges of Applied Arts and Technology

In every new venture, there must be a vision of the future, a vision which enables the pioneer to project his thoughts and ideals beyond the arduous first steps. Where goals are clear and high, progress is sure and sound.

The document which follows, SOME UNIQUE FEATURES is an attempt by a group of competent persons to give shape to their views of colleges as the years unfold.

It is not intended to provide an immediate blueprint but rather a goal towards which the new institutions should aim. Some of the suggestions readily lend themselves to immediate implementation; others must await the opportune moment.

If the COLLEGES OF APPLIED ARTS AND TECHNOLOGY in Ontario are to establish social identity, they must be based on four principles:

(1) they must embrace total education, vocational and avocational, regardless of formal entrance qualifications, with provision for complete vertical and horizontal mobility;

(2) they must develop curricula that meet the combined cultural aspirations and occupational needs of the student;

(3) they must operate in the closest possible cooperation with business and industry, and with social and other public agencies, including education, to ensure that curricula are at all times abreast, if not in advance of the changing requirements of a technological society;

(4) they must be dedicated to progress, through constant research, not only in curricula but in pedagogical technique and in administration.

From these four principles, a number of recommendations emerge.

BOARDS OF GOVERNORS and ADVISORY COMMITTEES

The Boards of Governors, assisted by a number of advisory committees at the local level will ensure maximal flexibility in the determination of community needs.

At the same time, these advisory committees will provide maximum communication between industry, business and other public agencies and the Colleges.

ROLE OF THE COLLEGE

COLLEGES OF APPLIED ARTS AND TECHNOLOGY are neither universities nor extensions of the secondary school; they will find their identity in service to that large segment of society that is inadequately served by the university; that is, those students and adults whose failure to recognize the applicability of the humanities, languages or abstract mathematics to their own lives has made them potential or actual dropouts. Programs of instruction in the Colleges, therefore, will encourage a learning atmosphere in which such students may feel reasonably comfortable—emotionally and socially; educationally and economically.

EDUCATIONAL SERVICES COUNCIL

An Educational Services Council, with a Director specially engaged to chair it and responsible only to the President, is recommended. This Director would be responsible for operations analysis within the College and, with the Council, would integrate, for maximum effectiveness, such services as those of the resource centre (library) and/or data centre, counselling, research programs, and teacher research projects. The key here is innovation.

CURRICULUM COMMITTEE

A Curriculum Committee, comprising three members from or representing the university, three from the College, and three from the secondary school should be appointed for each College to investigate the ways in which programs of study at the different levels of education may be integrated. The chairman of the Committee should be from industry, business or some public agency.

COLLEGE COMMITTEE

The faculty and student population of a COLLEGE OF APPLIED ARTS AND TECHNOLOGY will be more diverse than that of other educational institutions. This fact suggests some problems, but it should be possible to develop a strong sense of unity within the College, thus preventing the rather rigid class system that often prevails in other educational institutions. The result should be a broader vision of education than exists at present, among students and faculty, and so, among the general public. An active Students' Association should be a determining factor here and in the establishment of the community role of the College.

A College Committee, consisting of an equal number of student and faculty, with the President of the College as advisor, is proposed. The function of this Committee would be to promote understanding of college policy between faculty and students, and to provide a source of redress

for grievances of either group. Among the student-members should be the President of the Student Council and heads of student societies; among the faculty members should be the Superintendent of Buildings and Grounds, the Dean of Students and representatives of the College Divisions: Applied Arts, Business, and Technical. Monthly meetings of the Committee are suggested.

For the convenience of student and faculty committees, provision should be made in the timetable for their operation. A complete shut-down of academic procedures for a two-hour period weekly is suggested. Meetings could take the form of luncheon meetings, if the shut-down period were from 12:00 noon to 2:00 p.m.

COUNSELLING SERVICES

Adequate counselling services are critical. Admission to a College must be based on the ability profile of the student in a selected field of endeavour, rather than on prescriptive entrance requirements alone.

> What is of greater significance is the combination of basic capacity, energy, experience and motivation, which, with proper guidance, can lead to improved skills, better understanding, increased knowledge, alteration of values, and an enrichment of the adult life.
>
> (Siegle, Centre for the Study of Liberal Education for Adults)

This suggests a full range of diagnostic tests, coupled with personal interviews. It suggests further, a team of counsellors as the only viable method, with counsellors who are fully qualified in normal and social psychology, testing and evaluation, employment needs and conditions; and, since many students are often emotionally or physically handicapped, counselling entails the availability of psychiatric services.

It may be found necessary for the counselling division of a College to establish a Study Skills Clinic; many of the learning problems encountered in the College stem from an inability on the part of students to organize their activities in such a way as to derive the maximum benefit, personal or vocational, from their chosen programs of study.

A NEW DIMENSION IN EDUCATION

Educational Television should be developed to the maximum: open-circuit, with the employment of the video-tape recorder to preserve publicly televised programs for use within the College timetable; closed circuit, to enhance instruction, and to cope with the weight of numbers. Training in program preparation must be available to the best teachers

and to students, the latter engaging in E.T.V. program preparation as part of programs of study as varied as those in theatre arts and electronics.

THE COMMUNITY RESOURCE CENTRE

A broad spectrum of extension programs must be developed to include, along with regular evening classes, staggered timetables to accommodate shift-workers; correspondence courses, and satellite courses offered in outlying districts. For these, the resource centre (library) might operate 24 hours a day, if necessary, both on an attendance and on a mailing basis. Educational T.V., through the use of the video-tape recorder would be an important adjunct to such programs, as would laboratory facilities secured from educational institutions throughout a college area.

Two distinct types of programs would be offered: credit courses to parallel the regular day-time courses and leading to the same certificate or diploma; and cultural and recreational courses to fulfil community requirements for many leisure-time activities. Space for such recreational activities should be provided in workshop areas; thus, with painting, sculpture and so on, the College as a community Art Centre is a possibility.

As the community recreation and resource centre thus envisaged, a comprehensive COLLEGE OF APPLIED ARTS AND TECHNOLOGY will include (or divide among the divisions of a split campus) a professionally designed and equipped library (resource centre), a professionally designed and equipped auditorium, lecture theatres, seminar rooms, and lounges. The data centre is essential to research in new instructional techniques; to in-service research experiments; to course development; to faculty research needs; to professional development, and to teacher education.

PROFESSIONAL DEVELOPMENT

A new concept of teacher education, grounded in socio-economic principles and on the experience that will, hopefully, constitute a main strength in the college teacher, will be introduced. The preferred program is one of a pre-service orientation period followed by two years of in-service training.

During the in-service period, each group of teachers will perform regular teaching duties under a special counsellor with master teaching qualifications whose function is to advise rather than to assess. In this period, also, special courses in various important aspects of the educational process will be scheduled.

In the second in-service year, the student teacher will be required to engage in research in some aspect of teaching: programmed learning (as opposed to programmed instruction), and new techniques of testing and

evaluation; the results of this research could be embodied in a thesis for publication by the College. Acceptance of the thesis might constitute one of the prerequisites for certification, if such certification is deemed essential.

In connection with teacher education, an exploratory evening extension program is envisaged. This program would be directed towards employees of business, industry and the services who, with a desire to teach, may be uncertain of their qualifications to do so.

For all programs within the College, many of the teaching staff should be sought in industry, business and other public agencies. Experience "on the job" will provide one of the basic platforms of seminar work for in-service teacher education, as well as providing a basis for sound student-teacher relationships, an essential in adult education.

In the humanities there may be some difficulty in recruiting staff; the ideal is, of course, a Master's Degree in the subject area and experience outside the subject, coupled with a strong student-bias, itself based in an understanding of the socio-economic orientation of the student.

STUDENT ASSESSMENT

The credit system of student assessment, with the major emphasis on term, rather than on examination performance, is proposed. The credit system would solve the obvious inequities of the percentage and grade systems; would ensure standards comparable throughout the Ontario Colleges, and would promote ease of transfer, not only at home, but also throughout North America where the credit system is generally accepted in community colleges.

Experiments in the "Systems" approach to ungraded education and using the mechanics of modern educational technology should be begun immediately.

CURRICULUM CONFERENCES

The size of the College operation (19 colleges) would warrant frequent conferences of curriculum specialists from the various colleges. Again the aim should be standards rather than standardization; progress rather than conformity.

UPGRADING and ENRICHMENT PROGRAMS

Upgrading programs must be introduced at and for all levels, though the "Systems" approach to ungraded education might be followed here as well as in the regular College programs: from Grade 10 or lower to Grade 12; from the Grade 12 level of the Four-Year Programs to that of the Five-Year Programs; English language programs for non-English-

speaking new Canadians and for French-speaking Canadians in areas where instruction in French is, for various reasons, not feasible; specialty courses to meet the specific requirements of a College program.

For the language programs here proposed, language laboratories are essential; these should be designed in such a way as to serve the foreign language requirements of the many applied and general arts programs in which a language(s) other than English is required.

To meet the needs of what is possibly a very large number of adults, who, for various reasons, have failed to complete their formal education, there should be, in a COLLEGE OF APPLIED ARTS AND TECHNOLOGY, a liberal arts program. It is hoped that this program would be of the calibre that might meet the requirements for university entrance: a two-year program as an equivalent of Grade 13; a three-year program as an equivalent of, or for advance credits in, the first year of general arts at a university.

This program is to be regarded as distinct from the university transfer courses provided for under Section I 14 a, (5) of the Act. Some caution, however, must be taken in its creation: a COLLEGE OF APPLIED ARTS AND TECHNOLOGY should be guided by the divisional framework of general arts courses in the university and by university standards for teacher qualification.

In a COLLEGE OF APPLIED ARTS AND TECHNOLOGY, also, programs of study operated on a graduate basis for exceptional students are a possibility: skeleton outlines and T.V. lectures, preserved on video-tape, in conjunction with staff-advisors, so that such students might complete an extra year of study during a single semester. Here, as an extension of Section I 14 a, (5) of the Act, some agreement with a university for university make-up courses might also be reached.

COMPUTER UTILIZATION

Computer techniques should be introduced into a COLLEGE OF APPLIED ARTS AND TECHNOLOGY to integrate, for administrative purposes, student records and instruction; educational research and testing; financial accounting and inventory; retrieval of instructional materials (in the library-resource centre), and critical path studies for plant and equipment.

As part of the instructional program, also, students could be taught to understand the methods of such computer utilization.

February, 1967

Locations of
Colleges of Applied Arts and Technology

Area 1 ALGONQUIN COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
1385 Woodroffe Avenue,
Ottawa 5, Ontario. Phone: 224-1717
Chairman, Board of Governors: Mrs. G. V. Haythorne
President: Dr. F. T. Rosser

Area 2 ST. LAWRENCE COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
P.O. Box 6000,
Kingston, Ontario. Phone: 542-7349
Chairman,
Board of Governors: Dr. J. V. Basmajian
President: Mr. R. C. Short

Area 3 SIR SANDFORD FLEMING — LOYALIST COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
Chairman, Board of Governors: Rev. H. J. Maloney
Vice-Chairman,
Board of Governors,
Sir Sandford Fleming Campus: Mr. S. W. Daniel
P.O. Box 653,
Peterborough, Ontario. Phone: 743-6511
President: Mr. D. B. Sutherland
Vice-Chairman,
Board of Governors,
Loyalist Campus: Judge J. C. Anderson
c/o Centennial School,
Palmer Road,
Belleville, Ontario. Phone: 962-9955
President: Mr. J. K. Bradford

Area 4 DURHAM COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
304 Simcoe Street North,
Oshawa, Ontario. Phone: 576-0210
Chairman, Board of Governors: Mr. Stewart Alger
President: Dr. Gordon Willey

Area 5 CENTENNIAL COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
651 Warden Avenue,
Scarborough, Ontario. Phone: 694-3241
Chairman, Board of Governors: Rev. Dr. R. F. Stackhouse
President: Mr. John L. Haar

Area 6 HUMBER COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
3495 Lakeshore Boulevard West,
Toronto 14, Ontario. Phone: 259-8401
Chairman, Board of Governors: Mr. E. S. Jarvis
President:

Area 7 SENECA COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
P.O. Box 40,
Willowdale, Ontario. Phone: 223-9661
Chairman, Board of Governors: Dr. F. W. Minkler
President: Mr. W. T. Newnham

Area 8 SHERIDAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
90 Dundas Street West,
Cooksville, Ontario. Phone: 277-2711
Chairman, Board of Governors: Mr. J. A. Turner
President: Mr. J. M. Porter

Area 9 MOHAWK COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
196 Wentworth Street North,
Hamilton, Ontario. Phone: 529-2992
Chairman, Board of Governors: Judge W. K. Warrender
President: Mr. J. W. Hazelton

Area 10 NIAGARA COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
8 King Street,
Welland, Ontario. Phone: 735-0042
Chairman, Board of Governors: Mr. Paul Forestell
President: Dr. W. G. Bowen

Area 11 FANSHAWE COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
P.O. Box 4005, Terminal C,
London, Ontario. Phone: 455-9520
Chairman, Board of Governors: Mr. John G. Laurie
President: Dr. J. A. Colvin

Area 12 ST. CLAIR COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
660 Ouellette Avenue,
Windsor, Ontario. Phone: 253-7237
Chairman, Board of Governors: Mr. D. I. McWilliams
President: Dr. R. C. Quittenton

Area 13 LAMBTON COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
P.O. Box 969,
Sarnia, Ontario. Phone: 344-7434
Chairman, Board of Governors: Dr. W. G. Forbes
President: Mr. W. E. Franke

Area 14 CONESTOGA COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
279 Weber Street North,
Waterloo, Ontario. Phone: 743-2902
Chairman, Board of Governors: Mr. P. B. Mason
President: Mr. James W. Church

Area 15 GEORGIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
P.O. Box 13,000,
Barrie, Ontario. Phone: 728-1951
Chairman, Board of Governors: Mr. G. R. McCague
President: Mr. R. P. Crawford

Area 16 CAMBRIAN COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
261 Notre Dame,
Sudbury, Ontario. Phone: 675-6453
Chairman, Board of Governors: Dr. Walter Curlook
President: Mr. J. T. Koski

Area 17 NORTHERN COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
155 Pine Street North,
Timmins, Ontario. Phone: 264-9413
Chairman, Board of Governors: Magistrate W. S. Gardner
President: Mr. O. E. Walli

Area 18 CONFEDERATION COLLEGE OF APPLIED ARTS AND TECHNOLOGY,
411 Donald Street,
Fort William, Ontario. Phone: 577-2235
Chairman, Board of Governors: Dr. A. W. H. Challis
President: Air Vice Marshal,
D. A. R. Bradshaw